

WHAT IS CLAIMED IS:

1. A radiation image taking apparatus, comprising:
 - a radiation detecting unit that has a detection surface in which a photoelectric conversion element is arranged, and converts a radiation into an electrical signal;
 - a case that contains the radiation detecting unit;
 - 10 a grid unit which includes a grid that removes a scattered radiation and a grid frame; and
 - 15 a photo timer unit which includes a photo timer that measures a dose of the radiation and a photo timer frame, wherein:
 - the grid unit is detachably attachable to the case through the grid frame, and the photo timer unit is detachably attachable to the case through the photo timer frame; and
 - one of a first mode in which the grid unit is attached to the case, a second mode in which the photo timer unit is attached to the case, and a third mode in which the grid unit is attached in the second mode can be used.
 - 25 2. An apparatus according to claim 1, wherein the grid unit is engaged with first opposite sides of the case and the photo timer unit is engaged with

second opposite sides of the case which are different from the first opposite sides.

3. An apparatus according to claim 1, wherein a
5 distance between the grid and the detection surface in the first mode is different from a distance between the grid and the detection surface in the third mode.

10 4. An apparatus according to claim 1, wherein the case comprises detection means for detecting whether or not at least one of the grid unit and the photo timer unit is attached.

15 5. An apparatus according to claim 4, wherein the detection means can recognize identification information of at least one of the grid and the photo timer.

20 6. An apparatus according to claim 5, further comprising recording means for recording information obtained by the detection means as image taking information.

25 7. An apparatus according to claim 1, wherein the frame of the grid unit and the frame of the photo timer unit are made of a metal.